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Selected Bibliography of the Clearwing Borers (Sesiidae) of the United States and Canada

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SUMMARY

The larvae of Sesiidae bore in trunks, bark, stems, or roots of forest trees, shade and ornamental trees, fruit trees, vines, and other crops. Often they do considerable damage. Over the years much has been published on the clearwing borers; this bibliography attempts to cover the major works. The compilation is in alphabetical order by author and indexed to species to aid those interested in the literature concerning particular species.

Selected Bibliography of the Clearwing Borers (Sesiidae) of the United States and Canada

J. D. SOLOMON AND M. E. DIX

Members of the family Sesiidae are generally referred to as clearwing borers because most bear a striking resemblance to bees and wasps and because the larvae bore in trunks, bark, stems, or roots of trees, shrubs, vines, and other plants.

Many species, because of the extensive damage they do by mining and tunneling, are important pests. Species in the genera Paranthrene Hubner, Podosesia Moschler, Synanthedon Hubner, and Sesia Fab. are particularly known for causing defects and degrade in timber species, mortality in shelterbelt and ornamental plantings, and cull in nurseries. If not controlled, Synanthedon exitiosa (Say) and S. pictipes (G. & R.) can destroy entire orchards of fruit trees. Several species in the genera Vitacea Engelhardt, Melittia Hubner, and Pennsetia Dehne cause serious losses to various crops.

Over the years, considerable material has been printed on the clearwing borers. Holloway, Childers, and Gentry (311) recently published a bibliography on Synanthedon pictipes and S. exitiosa containing 163 references. Duckworth and Eichlin (193) included numerous references in their recent paper on classification.

The selective compilation presented here is an outgrowth of research on the *Podosesia* borers in ash and *Paranthrene* borers in oaks and cottonwood. We made an attempt to include the major papers on

Sesiidae, but some undoubtedly were missed. Although numerous short papers and notes were included, many were intentionally omitted.

The initial sources of references were our files and the various entomological, forestry, and agricultural periodicals. Other important sources were Biological Abstracts, Forestry Abstracts, Review of Applied Entomology, and the National Agricultural Library's reference service.

The bibliography is in alphabetical order by authors. An index to species and their synonyms is provided to aid those interested in pursuing the literature on particular species. The scientific names and the generic and specific combinations given with the citations are as they were presented in the particular reference. Refer to the species index for the current usage. The currently recognized valid species as presented by Duckworth and Eichlin (193) were used except that a new species later described by Purrington and Nielson (452) and one described by Duckworth and Eichlin (194) are included.

This bibliography is intended for use by entomologists, foresters, horticulturists, pest control operators, and others who wish to refer to the literature on the clearwing borers in the family Sesiidae.

Anyone beginning a study of the Sesiidae should see the papers by Beutenmuller, Duckworth and Eichlin, Edwards, Engelhardt, MacKay, and Riley.

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INDEX OF SPECIES

Albuna fraxini (Hy. Edwards) [morrisoni (Hy. Edwards), fraxini vitriosa Engelhardt] 55, 69, 191, 193, 226

Albuna pyramidalis (Walker) [hylotomiformis (Walker), nomadaepennis (Boisduval), rubescens (Hulst), montana Hy. Edwards, tanaceti Hy. Edwards, vancouverensis Hy. Edwards, coloradensis Hy. Edwards, torva Hy. Edwards, beutenmuelleri Skinner] 55, 57, 58, 69, 191, 193, 207, 214, 218, 222, 226, 237, 317, 357, 374, 520, 607, 637

Alcathoe carolinensis Engelhardt [autumnalis Engelhardt] 69, 96, 191, 193, 221, 226

Alcathoe caudata (Harris) [caudatum walkeri Neumoegen, caudata annettella Engelhardt] 67, 69, 191, 193, 215, 221, 226, 233, 237, 320, 342, 357, 374, 427, 471, 545

Alcathoe pepsioides Engelhardt [pepsioides atra Engelhardt, pepsioides ferrugata Engelhardt] 191, 193, 221, 226, 374

Alcathoe verrugo (Druce) [verrugo corvinus Engelhardt] 191, 193, 226

Calasesia coccinea (Beutenmuller) 61, 69, 191, 193, 226 Carmenta albociliata (Engelhardt) 191, 193, 219, 220, 226

Carmenta anthracipennis (Boisduval) [sanborni Hy. Edwards, morula (Hy. Edwards)] 55, 69, 191, 193, 215, 222, 224, 226, 237, 374, 385

Carmenta apache Engelhardt 191, 193, 226

Carmenta arizonae (Beutenmuller) 69, 191, 193, 226

Carmenta auritincta (Engelhardt) 191, 193, 219, 220, 226

Carmenta bassiformis (Walker) [Justrans (Grote), aureopurpura (Hy. Edwards), bolli (Hy. Edwards), sexfasciata (Hy. Edwards), consimilis (Hy. Edwards), eupatorii (Hy. Edwards), imitata (Hy. Edwards)] 54, 55, 56, 60, 69, 191, 193, 226, 237, 272, 310, 342, 357, 374, 419, 627

Carmenta corni (Hy. Edwards) [infirma (Hy. Edwards)] 54, 191, 193, 226, 374

Carmenta engelhardti Duckworth and Eichlin 190, 193

Carmenta giliae (Hy. Edwards) [vitrina (Neumoegen), deceptiva (Beutenmuller) giliae woodgatei Engelhardt] 55, 69, 191, 193, 226, 374, 410

Camenta ithacae (Beutenmuller) 69, 191, 193, 226, 237, 357, 374

Carmenta mariona (Beutenmuller) 66, 69, 191, 193, 226

Camenta mimuli (Hy. Edwards) [torrancia Engelhardt] 69, 191,193, 226

Carmenta odda Duckworth and Eichlin 193, 195

Carmenta ogalala Engelhardt 191, 193, 226

Carmenta phoradendri Engelhardt 191, 193, 226, 374

Carmenta prosopis (Hy. Edwards) 55, 59, 67, 69, 191, 193, 209, 214, 215, 223, 226

Carmenta pyralidiformis (Walker) [nigella (Hulst), pyralidiformis aurantis Engelhardt] 55, 69, 191, 193, 226, 237, 316, 342, 357, 374

Carmenta querci (Hy. Edwards) [comes (Heinrich)] 59, 67, 69, 191, 193, 209, 214, 226, 300, 374

Carmenta rubricincta (Beutenmuller) 71, 191, 193, 226

Carmenta subaerea (Hy. Edwards) 69, 191, 193, 211, 214, 226 Carmenta suffusata Engelhardt 193, 226

Carmenta tecta (Hy. Edwards) 69, 191, 193, 226

Carmenta texana (Hy. Edwards) [wittfeldii (Hy. Edwards)] 55, 69, 191, 193, 211, 214, 222, 226, 374

Carmenta verecunda (Hy. Edwards) [nigra Beutenmuller, florissantella (Cockerell), hirsuta (Engelhardt)] 55, 69, 148, 191, 193, 226

Carmenta welchelorum Duckworth and Eichlin 194

Carmenta wellerae Duckworth and Eichlin 192, 193

Cissuvora ampelopsis Engelhardt 191, 193, 226, 374

Euhagena emphytiformis (Walker) [solituda (Hy. Edwards)] 55, 69, 121, 191, 193, 218, 226

Euhagena nebraskae Hy. Edwards [coloradensis (Beutenmuller), nebraskae mormoni Engelhardt, nebraskae intensa Engelhardt] 69, 191, 193, 226

Hymenoclea palmii (Beutenmuller) 70, 191, 193, 226

Melittia calabaza Duckworth and Eichlin 193, 217

Melittia gloriosa Hy. Edwards [superba Barnes and Lindsey, lindseyi Barnes and Benjamin, barnesi Dalla Torre] 39, 40, 55, 64, 191, 193, 217, 218, 226, 374, 592, 606, 607

Melittia grandis (Strecker) [beckeri Druce, grandis hermosa Engelhardt] 64, 191, 193, 217, 226, 597

Melittia magnifica Beutenmuller 64, 191, 193, 217, 226

Melittia satyriniformis Hubner [cucurbitae (Harris), ceto (Westwood), amoea Hy. Edwards] 8, 9, 14, 64, 74, 98, 107, 113, 145, 175, 191, 193, 217, 226, 238, 283, 288, 304, 407, 314, 315, 316, 347, 356, 374, 378, 391, 392, 393, 401, 460, 485, 491, 507, 549, 556, 600, 608, 633, 634

Melittia snowii Hy. Edwards 55, 64, 191, 193, 217, 226, 374, 592 Osminia ruficomis (Hy. Edwards) [minuta (Hy. Edwards), candescens (Hy. Edwards), marcia (Druce)] 96, 191, 193, 208, 226

Palmia praecedens (Hy. Edwards) 110, 193, 210, 226

Paranthrene asilipennis (Boisduval) [denudatum (Harris), vespipenne (Herrich-Schaffer), bombyciformis (Walker), championi (Druce)] 54, 56, 62, 67, 69, 96, 179, 191, 193, 210, 214, 222, 226, 237, 357, 366, 374, 385, 402

Paranthrene dollii (Neumoegen) [dollii castaneum (Beutenmuller), dollii fasciventris Engelhardt] 1, 2, 3, 35, 58, 59, 60, 67, 69, 158, 179, 191, 193, 226, 236, 237, 357, 374, 397, 398, 399, 402, 411, 412, 582, 584, 585, 586, 588

Paranthrene fenestrata Barnes and Lindsey 40, 191, 193, 226
Paranthrene robiniae (Hy. Edwards) [perlucida (Busck), robiniae palescens Engelhardt] 55, 58, 59, 60, 67, 69, 120, 129, 179, 191, 193, 223, 226, 229, 335, 374, 404, 428, 468, 469, 606, 607, 637

Paranthrene simulans (Grote) [palmii (Hy. Edwards), luggeri (Hy. Edwards)] 35, 55, 57, 58, 59, 60, 67, 69, 96, 179, 191, 193, 213, 214, 216, 226, 237, 273, 297, 310, 327, 357, 365, 366, 374, 410, 414, 416, 419, 582, 584, 587, 588

Paranthrene tabaniformis (Rottemburg) [asiliformis (Denis & Schiffermuller), tricincta (Harris), serratiformis (Freyer), denotata (Hy. Edwards), tricincta oslari Engelhardt] 1, 22, 35, 55, 56, 58, 59, 60, 67, 69, 158, 166, 179, 191, 193, 210, 215, 226, 236, 237, 247, 290, 310, 337, 338, 340, 342, 343, 357, 374, 396, 399, 412, 428, 459, 545, 582, 584, 585, 588

Pennisetia marginata (Harris) [pleciaeformis (Walker), odyneripennis (Walker), rubi (Riley), flavipes (Hulst), marginata albicoma (Hulst)] 8, 9, 10, 15, 42, 54, 55, 56, 58, 59,

```
60, 67, 69, 95, 98, 108, 121, 127, 176, 191, 193, 207, 210, 214, 226, 229, 237, 240, 244, 254, 283, 290, 298, 310, 317, 319, 321, 339, 342, 357, 360, 363, 374, 378, 385, 396, 402, 455, 456, 457, 466, 486, 491, 494, 506, 545, 546, 547, 604, 606, 607, 608, 617, 623, 657
```

Penstemonia clarkei Engelhardt 191, 193, 226

Penstemonia dammersi Engelhardt [brevifolia Engelhardt] 191, 193, 226, 374

Penstemonia edwardsii (Beutenmuller) [utahensis (Beutenmuller)] 71, 191, 193, 224, 226, 374

Penstemonia hennei Engelhardt 191, 193, 226

Podosesia aureocincta Purrington and Nielsen 452

Podosesia syringae (Harris) [longipes (Moschler), fraxini (Lugger)] 5, 7, 26, 35, 43, 54, 57, 58, 59, 60, 67, 69, 94, 96, 177, 179, 191, 193, 207, 215, 216, 226, 229, 236, 237, 240, 241, 244, 252, 268, 278, 279, 280, 290, 310, 318, 327, 340, 341, 342, 357, 367, 370, 373, 374, 375, 385, 390, 396, 402, 405, 406, 412, 413, 414, 415, 416, 417, 418, 419, 421, 422, 423, 424, 425, 426, 428, 441, 444, 452, 473, 481, 511, 513, 514, 545, 582, 583, 584, 590, 591, 595, 596, 598, 604, 608, 613, 625, 630

Sannina uroceriformis Walker [quinquecaudata (Ridings), uroceripennis Boisduval] 7, 35, 43, 56, 59, 67, 69, 96, 191, 193, 203, 210, 214, 226, 237, 303, 310, 357, 374, 427, 462, 467, 472, 474, 584

Sesia apiformis (Clerck) [crabroniformis Denis and Schiffermuller] 7, 35, 54, 58, 59, 60, 63, 67, 69, 158, 179, 191, 193, 215, 225, 226, 229, 237, 310, 327, 335, 357, 374, 507, 545

Sesia tibialis (Harris) [flavitibia (Walker), pacificum (Hy. Edwards), californicum (Neumoegen), minimum (Neumoegen), tibialis dyari (Cockerell), tibialis anonyma (Strand), tibialis melanoformis Engelhardt] 35, 57, 58, 59, 60, 63, 67, 69, 129, 148, 158, 179, 191, 193, 225, 226, 229, 237, 290, 335, 357, 360, 374, 410, 428, 596, 606, 607

Synanthedon acerni (Clemens) [acericolum (Germadius), tepperi (Hy. Edwards), acerni buscki (Engelhardt)] 7, 35, 43, 49, 54, 58, 59, 60, 67, 69, 93, 94, 96, 97, 108, 109, 129, 144, 172, 179, 191, 193, 207, 209, 215, 226, 230, 231, 236, 237, 240, 253, 279, 280, 284, 310, 313, 319, 337, 340, 342, 357, 366, 370, 373, 374, 385, 396, 419, 459, 464, 465, 466, 470, 499, 500, 501, 504, 545, 598, 604, 627, 636 Synanthedon acerrubri Englehardt 35, 179, 191, 193, 219, 226,

357, 374 Synanthedon albicornis (Hy. Edwards) 54, 55, 59, 67, 69, 179, 191, 193, 207, 226, 237, 310, 357, 374, 467, 545, 607

Synanthedon alleri (Engelhardt) 191, 193, 226 Synanthedon arctica (Beutenmuller) 65, 66, 69, 191, 193, 202,

Synanthedon arizonensis (Beutenmuller) 61, 72, 191, 193, 226 Synanthedon arkansasensis Duckworth and Eichlin 190, 195

Synanthedon bibionipennis (Boisduval) [rutilans (Hy. Edwards), lupini (Hy. Edwards), perplexa (Hy. Edwards), impropria (Hy. Edwards), aureola (Hy. Edwards), neglecta (Hy. Edwards), washingtonia (Hy. Edwards), hemizoniae (Hy. Edwards), madariae (Hy. Edwards)] 10, 17, 51, 55, 56, 57, 58, 59, 67, 69, 124, 149, 187, 188, 191, 193, 207, 214, 215, 222, 223, 226, 229, 237, 283, 310, 374, 403, 467, 480, 606, 607, 637

Synanthedon bolteri (Hy. Edwards) 35, 55, 67, 69, 179, 191, 193, 211, 214, 226, 237, 357

Synanthedon canadensis Duckworth and Eichlin 190, 193 Synanthedon castaneae (Busck) 35, 118, 179, 191, 193, 219, 226, 357, 374 Synanthedon chrysidipennis (Boisduval) [tacoma (Beutenmuller), chrysidipennis wallowa (Engelhardt)] 61, 69, 191, 193, 214, 217, 222, 226, 374, 606, 607

Synanthedon culiciformis (Linnaeus) [culciformis americana (Beutenmuller)] 57, 58, 59, 60, 67, 69, 129, 179, 191, 193, 202, 218, 226, 229, 237, 335, 374, 606, 607

Synanthedon decipiens (Hy. Edwards) [imperfecta (Hy. Edwards), nicotianae (Hy. Edwards), rubristigma (Kellicott)] 55, 57, 58, 59, 60, 67, 69, 191, 193, 207, 226, 237, 300, 342, 343, 357, 374

Synanthedon dominicki Duckworth and Eichlin 190, 193

Synanthedon exitiosa (Say) [persica (Thomas), pepsidiformis (Hubner), xiphiaeformis (Boisduval), graefi (Hy. Edwards), opalescens (Hy. Edwards), exitiosa fitchii (Hy. Edwards), pacifica (Riley), exitiosa luminosa (Neumoegen), exitiosa edwardsii (Beutenmuller), graefi barnesii (Beutenmuller)] 7. 10, 11, 12, 13, 18, 23, 24, 27, 28, 30, 31, 32, 34, 37, 38, 41,42, 44, 47, 50, 54, 55, 57, 58, 59, 62, 63, 67, 68, 69, 75, 76. 77, 78, 79, 80, 81, 86, 87, 90, 92, 96, 98, 99, 102, 103, 104,108, 121, 122, 123, 125, 126, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 150, 153, 154, 157, 159, 160, 161, 167, 168, 169, 170, 171, 173, 175, 178, 184, 185, 186, 189, 191, 193, 197, 201, 205, 207, 210, 214, 215, 222, 226, 227, 228, 229, 234, 235, 237, 239, 240, 244, 245, 248, 249, 250, 251, 256, 258, 262, 263, 265, 266, 275, 276, 277, 279, 282, 285, 286, 287, 292, 293, 294, 295, 296, 305, 306, 310, 311, 322, 323, 324, 325, 326, 327, 328, 330, 333, 340, 342, 345, 346, 350, 351, 355, 357, 359, 361, 362, 364, 368, 369, 372, 373, 374, 376, 379, 380, 381, 382, 383, 384, 385, 386, 389, 395, 402, 405, 411, 412, 414, 416, 419, 420, 427, 429, 432, 433, 434, 435, 436, 437, 438, 439, 440, 449, 454, 458, 461, 468, 476, 479, 482, 483, 487, 488, 489, 491, 495, 496, 502, 503, 505, 507, 515, 517, 518, 519, 522, 523, 524, 525, 526, 527, 528, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 542, 543, 544, 548, 550, 551, 552, 553, 554, 555, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 577, 578, 579, 580, 581, 584, 593, 594, 604, 605, 606. 607, 609, 610, 611, 612, 615, 619, 620, 622, 627, 631, 633, 637, 649, 650, 651, 652, 653, 655, 656, 658, 659, 660 Synanthedon fatifera Hodges 191, 193, 308, 333, 374, 419 Synanthedon fulvipes (Harris) 58, 69, 191, 193, 226, 239, 290,

357
Synanthedon geliformis (Walker) 35, 58, 69, 191, 193, 207, 211, 226, 374, 304

226, 374, 394 Sunanthedon helenis (Engelhardt) 191, 193, 226

Synanthedon helenis (Engelhardt) 191, 193, 226 Synanthedon kathyae Duckworth and Eichlin 193, 195

Synanthedon millinipennis (Boisduval) [artemisiae (Hy. Edwards), seneciodes (Hy. Edwards)] 55, 57, 58, 69, 116, 179, 191, 193, 207, 214, 226, 301, 335, 637, 638

Synanthedon novaroensis (Hy. Edwards) [piceae (Dyar), brunneri (Busck)] 55, 58, 69, 111, 112, 119, 129, 179, 191, 193, 204, 207, 226, 229, 335, 606, 607, 637

Synanthedon pictipes (Grote and Robinson) [inusitata (Hy. Edwards)] 7, 9, 10, 16, 19, 20, 21, 25, 28, 33, 35, 50, 54, 55, 59, 67, 69, 82, 83, 84, 85, 86, 87, 89, 91, 96, 114, 115, 117, 125, 126, 128, 136, 137, 146, 147, 162, 179, 180, 181, 182, 183, 191, 193, 196, 197, 198, 207, 215, 219, 226, 236, 237, 249, 250, 251, 255, 259, 260, 261, 269, 270, 272, 279, 286, 296, 310, 311, 312, 327, 331, 332, 333, 337, 340, 342, 346, 348, 349, 352, 354, 357, 371, 372, 373, 374, 376, 377, 378, 385, 387, 388, 395, 402, 405,

407, 416, 419, 420, 430, 431, 450, 453, 475, 476, 477, 478, 482, 483, 488, 515, 531, 533, 540, 541, 557, 570, 571, 576, 595, 612, 616, 624, 627, 639, 640, 641, 642, 643, 644, 645, 646, 649, 659, 660, 661, 662

Synanthedon pini (Kellicott) 35, 58, 59, 60, 67, 69, 129, 132, 179, 191, 193, 201, 210, 215, 226, 231, 237, 244, 267, 310, 336, 337, 338, 340, 357, 374, 402, 428, 598, 599

Synanthedon polygoni (Hy. Edwards) [fragariae (Hy. Edwards), helianthi (Hy. Edwards), archillae (Hy. Edwards), eremocarpi (Hy. Edwards), meadii (Hy. Edwards), orthocarpi (Hy. Edwards), praestans (Hy. Edwards), behrensii (Hy. Edwards), animosa (Hy. Edwards), elda (Hy. Edwards), fragariae semipraestans (Cockerell)] 55, 56, 57, 58, 69, 96, 148, 191, 193, 207, 209, 210, 211, 212, 214, 218, 226, 374, 607, 637, 638

Synanthedon proxima (Hy. Edwards) [modesta (Kellicott)] 35, 43, 191, 193, 207, 226, 342

Synanthedon pyri (Harris) [koebelei (Hy. Edwards)] 45, 47, 54, 55, 58, 59, 60, 67, 69, 96, 101, 191, 193, 207, 215, 226, 233, 237, 240, 289, 290, 292, 294, 310, 337, 340, 344, 357, 374, 385, 396, 402, 427, 467, 483, 545, 603, 604, 627, 628, 647, 648

Synanthedon refulgens (Hy. Edwards) [marica (Beutenmuller), seminole (Beutenmuller)] 58, 62, 69, 96, 191, 193, 207, 226, 411

Synanthedon resplendens (Hy. Edwards) 55, 105, 191, 193, 207, 226, 327, 374, 394, 490

Synanthedon rhododendri (Beutenmuller) 35, 71, 93, 94, 97, 98, 99, 174, 191, 193, 226, 232, 237, 280, 281, 327, 357, 358, 374, 408, 409, 412, 511, 590, 591, 630, 635

Synanthedon richardsi (Engelhardt) 191, 193, 226

Synanthedon rileyana (Hy. Edwards) [brunneipennis (Hy. Edwards), hyperici (Hy. Edwards), austini (Engelhardt)] 55, 69, 96, 191, 193, 226, 237, 357, 374, 419, 589, 607

Synanthedon rubrofascia (Hy. Edwards) 35, 59, 69, 191, 193, 207, 226, 237, 325, 329, 357, 374, 419

Synanthedon sapygaeformis (Walker) [floridensis (Grote)] 35, 55, 58, 59, 60, 67, 69, 191, 193, 207, 226, 271, 374, 396, 400

Synanthedon saxifragae (Hy. Edwards) [henshawii (Hy. Edwards)] 55, 57, 58, 69, 191, 193, 207, 210, 226, 239, 529, 607

Synanthedon scitula (Harris) [gallivorum (Westwood), hospes (Walsh), corusca (Hy. Edwards), aemula (Hy. Edwards)] 4,

7, 35, 55, 57, 58, 59, 60, 67, 69, 96, 151, 179, 191, 193, 205, 207, 208, 211, 214, 226, 236, 237, 243, 290, 298, 302, 310, 327, 333, 342, 352, 357, 358, 374, 396, 402, 404, 408, 409, 412, 414, 419, 428, 442, 443, 446, 447, 508, 509, 510, 511, 512, 521, 614, 618, 621, 630, 631, 632

Synanthedon sequoiae (Hy. Edwards) [superba (Hy. Edwards), pinorum (Behrens)] 48, 57, 58, 59, 60, 67, 69, 106, 110, 111, 129, 130, 179, 191, 193, 207, 226, 229, 242, 310, 334, 335, 374, 419, 428, 451, 606, 607, 629, 637, 638

Synanthedon sigmoidea (Beutenmuller) 35, 59, 60, 69, 179, 191, 193, 226, 237, 357, 374

Synanthedon tipuliformis (Clerck) 9, 53, 54, 60, 67, 69, 73, 87, 88, 99, 108, 124, 125, 127, 131, 152, 154, 155, 156, 163, 164, 165, 176, 191, 193, 201, 214, 215, 226, 229, 233, 237, 240, 244, 245, 264, 287, 291, 292, 309, 310, 342, 357, 360, 362, 366, 374, 385, 402, 405, 420, 427, 445, 491, 497, 498, 545, 595, 601, 602, 604, 606, 607, 609, 620, 626, 627

Synanthedon viburni Engelhardt 35, 191, 193, 219, 226, 257, 333, 357, 374

Vitacea admiranda (Hy. Edwards) 55, 57, 58, 69, 191, 193, 208, 226, 310

Vitacea cupressi (Hy. Edwards) 58, 69, 191, 193, 207, 226

Vitacea polistiformis (Harris) [seminole (Neumoegen), polistiformis huron Engelhardt] 6, 29, 36, 52, 54, 60, 67, 69, 96, 100, 143, 191, 193, 199, 215, 226, 233, 237, 240, 293, 310, 340, 374, 385, 420, 427, 448, 463, 479, 492, 493, 604

Vitacea scepsiformis (Hy. Edwards) 58, 69, 191, 193, 207, 226, 237, 357, 374

Zenodoxus canescens Hy Edwards [canescens sidae Engelhardt] 55, 69, 191, 193, 226

Zenodoxus heucherae Hy. Edwards [potentillae Hy. Edwards] 55, 69, 191, 193, 226

Zenodoxus maculipes Grote and Robinson 55, 69, 191, 193, 226 Zenodoxus mexicanus Beutenmuller 69, 191, 193, 226

Zenodoxus palmii (Neumoegen) [palmiana (Dallas Torre), wissadulae Engelhardt, palmii sphaeralceae Engelhardt, palmii incanae Engelhardt] 191, 193, 223, 226, 374

Zenodoxus rubens Engelhardt [canescens bexari Engelhardt] 191, 193, 226

Zenodoxus sidalceae Engelhardt 191, 193, 226, 374

Solomon, J. D. and M. E. Dix

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